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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,393	08/15/2006	Yasuhiro Ikeboh	2936-0282PUS1	7135

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EXAMINER	
PHASGE, ARUN S	

ART UNIT	PAPER NUMBER
1795	

NOTIFICATION DATE	DELIVERY MODE
04/05/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/589,393	IKEBOH ET AL.	
	Examiner	Art Unit	
	Arun S. Phasge	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/16/09, 8/15/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-16 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 15-29 of copending Application No. 11/629,351. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are fully encompassed by the claims of the copending application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102/103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 8, 9, 12-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schlager et al. (Schlager), U.S. Patent Application Publication 2003/0164308.

Schlager discloses the unit including a plurality of electrodes, a drive circuit that applies a voltage between the electrodes, wherein the metal ions are eluted from the positive electrode by the application of voltage between the electrodes, wherein the unit further comprises a control circuit which reverses the polarity of the voltage applied between the electrodes (see figure 1 and abstract).

The reference fails to disclose the function recitation of the current modes having different values. It has been well settled that such functional recitation are given little or no patentable weight in device claims. Therefore, the claims are anticipated, since the control circuit of Schlager is capable of accomplishing the function recited in the claims.

The Board of Patent Appeals and Interferences in *Ex Parte Masham*, 2 USPQ 2d 1647 (1987) stated, "a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the structural limitations of the claimed." The device "does not undergo a metamorphosis to a new apparatus merely by affixing instructions thereto on the use."

In the event the functional recitations provide a structural limitation, the Schlager reference further teaches the modification to control the metal concentration based upon the water being treated by varying the current and/or flow rate (see section [0057]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Schlager by the teachings contained therein.

One having ordinary skill in the art would have been motivated to do this modification, because the Schlager reference teaches the modification to control the current based upon the amount of metal desired.

Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlager as applied to claims above, and further in view of Hayes, U.S. Patent 6,929,740.

The Schlager reference fails to disclose the rest time inserted between the reversal of polarity, with the electrodes at short-circuit during the rest periods.

The Hayes patent is cited to show the use of a rest period between reversals of polarity (see figure 6 and claim 6). To short circuit the electrodes to prevent the galvanic current would have been obvious to one having ordinary skill in the art.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Schlager by the teachings contained in Hayes.

One having ordinary skill in the art would have been motivated to do this modification, because the Hayes patent teaches the modification to the reversal of polarity to provide rest periods between the reversals.

Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlager as applied to claims above, and further in view of Grundler, U.S. Patent 4,769,119.

The Schlager reference fails to disclose the control circuit is changed based upon values, such as conductivity.

The Grundler patent is cited to show the use of conductivity to control the electrolysis through a control circuit (see col. 4, lines 1-17).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Schlager by the teachings contained In Grundler.

One having ordinary skill in the art would have been motivated to do this modification, because the Grundler patent teaches the use of conductivity to control the circuit.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schlager as applied to claims above, and further in view of Ooe et al. (Ooe), U.S. Patent Application Publication 2006/0130533.

The Schlager reference fails to disclose the use of the ion eluting unit in a washing machine. The Ooe reference is cited to show the use of an ion eluting unit used to treat the water in a washing machine (see abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Schlager by the teachings contained in Ooe.

One having ordinary skill in the art would have been motivated to do this modification, because the Ooe reference teaches the use of an ion eluting device in a washing machine to produce a treated water.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Phasge whose telephone number is (571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Arun S. Phasge/
Primary Examiner, Art Unit 1795

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